



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/788,975

02/27/2004

Noriyuki Matsukaze

FUJI:301

6820

37013 7590 03/25/2009
ROSSI, KIMMS & McDOWELL LLP.
20609 Gordon Park Square, Suite 150
Ashburn, VA 20147

EXAMINER

DHINGRA, RAKESH KUMAR

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

03/25/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/788,975	Applicant(s) MATSUKAZE ET AL.	
	Examiner RAKESH K. DHINGRA	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 1-3 and 7-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-6 and 10-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

35 U.S.C. 112

In view of amendments to claims 4, 10, the rejection is dropped.

Drawings

Figure 5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Response to Arguments

Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection as explained hereunder.

Applicant has amended claims 4, 10 by adding new limitations, e.g. in claim 4 new limitation like "said vacuum chamber being connected to a first exhauster" etc, have been added.

References by Iida (JP 10-092800) when combined with Kawai et al read on limitation of amended claim 1. Accordingly claims 4, 10 have been rejected under 35 USC 103 (a) as explained below. Further, balance claims 5, 6, 11-18 have also been rejected under 35 USC 103 (a) as explained below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai et al (JP 2002-249868) in view of Iida (JP 10-092800).

Regarding Claim 4: Kawai et al teach a vapor deposition apparatus comprising:

a line source 62 positioned in a vacuum chamber 20 where deposition occurs, said vacuum chamber being connected to a first exhauster 10, and

a material introducing part 30 positioned inside of said vacuum chamber, wherein a vapor-state organic material is fed into said line source 62 from said material introducing part 30, to form a film on at least one substrate disposed inside said vacuum chamber (e.g. Fig. 1 and para. 0021-0032).

Kawai et al do not teach the material introducing part is positioned outside the vacuum chamber, and in the material introducing part the pressure can be set independently of the

Art Unit: 1792

pressure in said vacuum chamber, said material introducing part being connected to a second exhauster.

Iida teaches a deposition apparatus comprising a material introducing part 1 positioned outside a vacuum chamber 15 with a first exhauster (valve 14) and where the material introducing part 1 has a second exhauster (valve 13) that enables to obtain sublimation refining of the deposition raw material (e.g. Figs. 1, 2 and para. 0013-0032).

Further, claim limitation regarding the use of organic material pertains to content of the apparatus during an intended use, and since the structure of prior art meets the structural limitations of the claim, the same is considered capable of meeting these limitations.

In this connection the courts have ruled:

Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim. Ex parte Thibault, 164 USPQ 666, 667 (Bd. App. 1969).

Regarding Claim 10: Kawai et al in view of Iida teach all limitations of the claim (as already explained above under claim 4) including a substrate 200 that is processed by the apparatus.

Further, claim limitation “forming an organic EL layer” is an intended use limitation, and since the structure of prior art meets the structural limitations of the claim, the same is considered capable of meeting these limitations.

In this connection the courts have ruled:

A claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art

Art Unit: 1792

apparatus” if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987).

Claims 5, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai et al (2002-249868) in view of Iida (JP 10-092800) as applied to claims 4, 10 and further in view of Van Slyke (US 2003/0203638).

Regarding Claims 5, 11: Kawai et al in view of Iida teach all limitations of the claim including the material introducing part 1 including a crucible 4 and heating means 5 for heating the crucible (Fig. 1).

Kawai et al in view of Iida do not teach crucible fixing means for holding the crucible.

Van Slyke teaches a deposition apparatus comprising a vacuum chamber 130, a material introduction source 500VS disposed outside the vacuum chamber and a crucible holding means 525 for supporting the crucible (.e.g. Fig. 4 and para. 0047-0060).

Therefore it would have been obvious to one of ordinary skills in the art at the time of the invention to provide crucible holding means as taught by Van Slyke in the apparatus of Kawai et al in view of Iida to enable support the crucible in a stable manner.

Claims 6, 12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai et al (2002-249868) in view of Iida (JP 10-092800) as applied to claims 4, 10 and further in view of Grace et al (US 2004/0144321).

Regarding Claims 6, 12: Kawai et al in view of Iida teach all limitations of the claim but do not teach the line source has a blocking plate for dispersing the vapor state organic material that has been fed therein, and said blocker plate is temperature controlled.

Art Unit: 1792

Grace et al teach a deposition apparatus comprising a deposition line source 10 with a blocker plate 6. Grace et al further teach the blocker plate 6 can be provided with heater (temperature controlled) to control material flow of the deposition apparatus [e.g. Figs. 1, 2 and para. 0035-038].

Therefore it would have been obvious to one of ordinary skills in the art at the time of the invention to provide the line source with a blocker plate that is temperature controlled as taught by Grace et al to enable control the material flow of the deposition material.

Regarding Claims 13-18: Grace et al teach the blocker plate has a large number of holes 13 that are distributed over the surface of the blocker plate which helps to streamline the flow of vapor (Figs. 1, 2 and Para. 0037).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 1792

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAKESH K. DHINGRA whose telephone number is (571)272-5959. The examiner can normally be reached on 8:30 -6:00 (Monday - Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on (571)-272-1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rakesh K Dhingra/
Examiner, Art Unit 1792

/K. M./
Primary Examiner, Art Unit 1792